US Army Corps
of Engineers
Rock Island District

U.S. ARMY DEFENSE AMMUNITION CENTER
McAlester, Oklahoma

DEFENSE ENVIRONMENTAL RESTORATION PROGRAM
for
FORMERLY USED DEFENSE SITES
ORDNANCE AND EXPLOSIVES

ARCHIVES SEARCH REPORT

CONCLUSIONS AND RECOMMENDATIONS

FOR

NANTUCKET MUNICIPAL AIRPORT
FORMER
NAVAL AUXILIARY AIR FACILITY
NANTUCKET ISLAND, MASSACHUSETTS
PROJECT NUMBER D01MA049901

February 2001

DRAFT

DEFENSE ENVIRONMENTAL RESTRORATION PROGRAM
for
FORMERLY USED DEFENSE SITES

CONCLUSIONS AND RECOMMENDATIONS

Ordnance and Explosives Archives Search Report For The Former Nantucket Naval Auxiliary Air Facility Nantucket Island, Massachusetts PROJECT NUMBER DO1MA049901

February 2000

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Ordnance and Explosives
Archives Search Report
CONCLUSIONS AND RECOMMENDATIONS
For The Former
Nantucket Naval Auxiliary Air Facility
Nantucket Island, Massachusetts
PROJECT NUMBER D01MA049901

ACKNOWLEDGMENT

The following persons provided support as indicated.

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Ordnance and Explosives
Archives Search Report
For
Nantucket Municipal Airport
(Naval Auxiliary Air Facility)
Nantucket Island, Massachusetts
Project Number D01MA049901

CONCLUSIONS AND RECOMMENDATIONS

The following conclusions and recommendations are provided by the Archives Search Report Team. These recommendations may not be the actions taken to remediate this site.

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1. INTRODUCTION

a. **Subject and Purpose**

(1) This report presents the Conclusions and Recommendations of an historical records search and site inspection for ordnance and explosives (OE) presence located at the former Naval Auxiliary Air Facility Nantucket. See plate 1 for general location map. The investigation was performed under the authority of the Defense Environmental Restoration Program for Formerly Used Defense Sites (DERP-FUDS).

(2) The purpose of this investigation was to characterize the site for potential OE presence, to include conventional ammunition and chemical warfare materiel (CWM). This was achieved by a thorough evaluation of historical records, interviews, and an on-site visual inspection.

b. **Scope**

(1) The investigation covers 577.5 acres of which 572 acres were qualified in the INPR. The site inspection team discovered 5.5 acres during the records search that was not part of the INPR and determined the land was leased for security purposes since it gave a clear view of the airfield. The 5.5 acres was used as an administration area only.

(2) NAE may wish to amend the FDE to reflect the additional 5.5 acres.

(3) The conclusions and recommendations presented in this report were made from available records and the visual site inspection. The conclusions, including ordnance risk assessments, were based on direct or documented evidence and reasonably inferred evidence from the investigation.

2. CONCLUSIONS

a. **Summary of Conclusions**

Table 2-1 has been provided to summarize conclusion made on each of the potential OE areas within the former Naval Auxiliary Air Facility.

TABLE 2-1
SUMMARY OF CONCLUSIONS

					ORDNANCE PRESENCE			
Area	Former Usage	Present Usage	Probable End Usage	Size Acres*	Confirmed Ordnance	Potential Ordnance	None	Risk Assessment Code
A	Magazine Area	Airport	Airport	11.5	-	-	Yes	5
B	Wooded Dump Site	Airport	Airport	2.0	Yes	-	-	3
C	Runway Open Storage/ Dump site	Airport	Airport	48.0	-	-	Yes	5
D	OTHER LANDS	Airport	Airport	516.0**	-	-	Yes	5
TOTAL ACREAGE:577.5								

*Indicates approximate acreage
** Includes 5.5 acres of Privately own land used for administration area only.

b. **Historical Site Summary**

(1) On 1 Oct 1940, a Naval Air Station became operational at Quonset Point, Rhode Island. This station was named the Naval Air Station (NAS) Quonset Point with an assigned mission of engaging in neutrality patrol and inshore patrol. This station was placed in full commission on 12 July 1942.

(2) In order to meet the requirements of the Department of the Navy's 27,500-plane program and to effect dispersal of aircraft and personnel at NAS Quonset Point due to an increasing mission, several outlying auxiliary air facilities needed to be established. On 29 October 1942, leases for one facility, totaling approximately 572 acres of public airport land, were obtained on Nantucket Island, Massachusetts, which was to become the Naval Auxiliary Airfield (NAAF) Nantucket, the subject of this report. This NAAF was scheduled to become a minor NAAF of

NAS Quonset, with a proposed station refueling and emergency support mission for one-half (½) carrier air group (CVG) of the Eastern Sea Frontier Command.

(3) On 13 September 1943, NAAF Nantucket was commissioned. Facilities constructed or present on NAAF Nantucket upon commissioning included two (2) 4000-foot runways, five (5) barracks huts for 100 enlisted men, two (2) bachelor officer's quarters (BOQ) huts for six (6) officers, one (1) enlisted men's mess and recreation hut for 64 men, one (1) officer's mess and recreation hut for 40 officers, one (1) galley hut, one (1) hangar, one (1) pump house, two (2) dry stores structures, one (1) operations tower, one (1) control house, one (1) small parts hut, one (1) shed, a sewage disposal unit, and two (2) ammunition magazine huts. The initial facilities of the NAAF were to support a refueling and emergency field mission that was to be provided for the Eastern Sea Frontier Command. However, historical documents reflect that it was being utilized before it's commissioning, and afterward, as a staging point for gunnery, rocket and torpedo training activities in the NAS Quonset Point area.

(4) In or around September 1943, NAAF Nantucket was improved by the addition of an ammunition fuzing hut and 8,000 yards of soil cement stabilized roads, added in the airfield area for the transportation of ammunition and the accommodation of aircraft during ammunition loading operations. The necessity of the additions were for the furtherance of the experimental rocket training program to be carried on by the Navy Air Force, Atlantic Fleet, on an adjacent 2,896-acre rocket range known as the Tom Nevers Target Area (Nantucket Ordnance Site).

(5) Five and one half (5½) acres of additional private lands (with structures) were leased for NAAF Nantucket use on 24 March 1944. NAAF lands now totaled 577.5 acres.

(6) In or around October 1944, four 14 X 49-foot prefabricated steel magazines, required for the storage of plaster loaded rocket type ammunition, and the extension of the rocket assembly hut (previously termed fuzing hut), were improvements approved for NAAF Nantucket. The addition of the four magazines were to supplement the four magazines stated to be present at that time (see document F-4). Other improvements added in 1944 included a

photographic laboratory, a four (4) bed dispensary, several operations buildings and squadron offices, a small commissary, cold storage facilities, a gate house, a gasoline storage facility, a firehouse, hangars for planes of one squadron, 14,089 yards of parking space, and water tanks.

(7) In or around June 1945, the previously approved additional ammunition magazines for rocket and rocket motor storage were added to NAAS Nantucket and the extension of the rocket assembly hut occurred. Other additions to NAAS Nantucket included three additional enlisted men barracks, a BOQ for 50 officers, extensions to the galley and messhall and administrative building, a public works building, a supply warehouse, a recreation building, an aircraft maintenance shop, a laundry extension, a standard control tower, 22,500-feet of additional parking area, additional water storage and fire hydrants, additional leaching facilities and sewer lines, minor extension of utilities, semi- permanent taxiway and runway lighting, and miscellaneous minor facilities. These and previously approved facilities were added for the continuous rocket training of 36 aircraft at 3 rocket ranges on Nantucket Island. The rocket-training syllabus called for a minimum of 64 rounds of rocket ammunition for each pilot. The three ranges on Nantucket Island used for this training were the previously mentioned 2,896-acre rocket range, the Tom Nevers Target Area (Nantucket Ordnance Site), being east and adjacent to NAAF lands the Hummock Pond Aerial Target Range, being west of NAAF lands and the 852.6 acre Sheep Pond Rocket Training Range being west of NAAF lands. In addition to the three rocket ranges, a water bombing target was located in the Atlantic Ocean approximately .5 miles south of the south shore of Nantucket Island. This was located in an area locally known as Surfside, with several other ranges also being located away from Nantucket Island, which NAAF Nantucket may have supported during it's period of operation. The Hummock Pond Range was used as a moving target machine gun and strafing range prior to or during its period of operation as a rocket range, which NAAF Nantucket may have also supported for those forms of aircraft firing.

(8) On 1 September 1945, the rocket ranges at Nantucket were secured and rocket training ceased.

(9) On 15 September 1945, operations ceased at NAAF

Nantucket.

(10) On 1 December 1945, NAAF Nantucket was decommissioned and transferred to caretaker status in accordance with Commander Naval Air Bureau letter 90-45, dated 21 July 1945.

(11) On 15 January 1946, NAAF Nantucket was disestablished.

(12) On 17 April 1946, the Navy Bureau of Yards and Docks declared NAAF Nantucket surplus to the War Assets Administration.

(13) On 15 May 1946, NAAF Nantucket was released by the Department of the Navy to the Town of Nantucket (see document G-2) for use as a public airport. The lease for the five and one half (5 ½) acres of additional private lands leased by the Navy were returned to the landowners on or before 30 June 1946.

(14) On 12 November 1946, the Operations Officer, First Naval District, certified that NAAS Nantucket had been inspected for the presence of explosive ammunition and explosives, and that the decontamination of the NAAF had been effected or was not otherwise required.

(15) On 20 November 1947 (registered with the Nantucket Registry District of the Land Court on 6 January 1948) the War Assets Administration quitclaimed to the Nantucket Airport Commission all its right, title, and interest in the Nantucket Municipal Airport, formerly the NAAF Nantucket. Then, on 9 July 1948, the War Assets Administration released all rights and interest in buildings 1, 13, 15, 17, 32, 33, 34, 35, 39, 40, 41, and 42 and all property and systems contained within those buildings.

c. **Site Eligibility**

(1) Former Naval Auxiliary Air Facility land usage by the Department of Defense (formerly War Department) is substantiated by historical maps, documents, and physical evidence which display the utilization of approximately 572 acres of land on Nantucket Municipal Airport by the Navy as an auxiliary airfield, station refueling and emergency support mission for one-half (½) carrier air group (CVG) of

the Eastern Sea Frontier Command.

(2) The site inspection team discovered 5.5 acres during the records search that was not part of the PAE and determined the land was leased for security purposes since it gave a clear view of the airfield. The land was used as an administration area only and is include in Area D (Other Lands).

(3) NAE may wish to amend the FDE to reflect the additional 5.5 acres.

d. **Visual Site Inspection**

(1) During the period of 12 through 14 January 2000, members of the Assessment Team, Mr. Jon P Jones and Mr. John Wilken, visited the project portion of the former Nantucket Naval Auxiliary Air Facility . The primary task of the team was to assess OE presence and potential. The site inspection was limited to non-intrusive methods; i.e. subsurface sampling was not authorized nor performed.

(2) A site safety plan was developed and utilized by the assessment team to assure safety from injury during the site inspection of the area (reference B-4). Prior to the inspection, a briefing was conducted which stressed that military EOD personnel should only handle OE.

(3) Prior to the site visit, a thorough review of all available reports, historical documents, texts, and technical ordnance reference materials gathered during the historical records search was made to ensure awareness of potential ordnance types and associated hazards.

(4) **Area A: Magazine Area:** This area consists of approximately 11.5 acres of sparsely vegetated land located on the current airport property. The area was used to store ammunition and ammunition components. The former Naval storage magazines are currently utilized by Nantucket Municipal Airport and private businesses as storage areas. Magazine 8 is no longer standing it is not certain when or how the structure was taken down (see Plate 3).

(5) An inspection of this area by the site inspection (SI) team found no OE or evidence of OE in this area.

(6) **Area B: Wooded Dump Area:** This area consists of approximately 2.0 acres of fully vegetated land. This area appears to be the dumpsite the Navy used during the time the Navy occupied the airport. The area also had several dirt mounds that was uncharacteristic to the relatively level area. These mounds could possibly be a potential OE burial location which was an authorized procedure during that time or a Native American burial ground (see Plates 3, 4).

(7) An inspection of this area by the site inspection (SI) team revealed the area has evidence of a large amount of inert OE scrap.

(8) **Area C: Runway Dump Area/ Open Storage:** This area consists of approximately 48.0 acres of sparsely vegetated land located on the current airport property. The vegetation consists of mostly Quercus Ilicifolia or Scub Oak trees or brush. The area was used as an outside storage area and dump area for equipment during the time frame when it was under the control of the Navy. Nantucket Municipal Airport has utilized this same area over the years and today only use a small portion of the same area for outside storage and dump.

(9) An inspection of this area by the site inspection (SI) team found no OE or evidence of OE in this area (see Plates 3,4).

(10) **Area D: All Other Lands:** This area consists of all property identified as part of the former Naval Auxiliary Air Facility, other than that contained within Areas A through C (approximately 516 acres). The SI team found no historical, interview, or physical evidence of an OE presence within this area.

e. **Confirmed Ordnance Areas**

Confirmed ordnance presence is based on verifiable historical evidence, direct witness, or reliable indirect witness of energetic ordnance items since site closure. Area B is a confirmed ordnance area.

f. **Potential Ordnance Areas**

Potential ordnance areas are based on lack of

confirmed ordnance. Potential ordnance presence is inferred from records or indirect witness. There were no areas determined to have a potential ordnance presence.

g. **No Ordnance Presence Areas**

No ordnance presence areas are based on lack of evidence of confirmed or potential ordnance presence. Areas A,C, and D is considered a no ordnance presence area.

h. **Other Environmental Hazards**

There was no evidence of any other environmental hazards at the site.

3. RECOMMENDATIONS

a. **Summary or Recommendations**

(1) Table 3-1 on the following page represents a summary of recommended actions for the former Naval Auxiliary Air Facility.

(2) NAE may wish to amend the FDE to reflect the additional 5.5 acres.

b. **Preliminary Assessment of Eligibility Actions**

No preliminary assessment actions for Nantucket Municipal Airport are necessary at this time.

TABLE 3-1
SUMMARY OF RECOMMENDATIONS

			PAE Actions	**OE Actions**		**HTRW**	**BD/DR**
Area	Former Usage	Size Acres*	Amend INPR	No DOD Action Indicated ***	Perform EE/CA	Perform SI	Perform SI
A	Magazine Area	11.50	----	Yes	----	----	----
B	Wooded Dump Site	2.00	----	----	Yes	----	----
C	Runway Open Storage/ Dump site	48.00	----	Yes	----	----	----
D	OTHER LANDS	516.00**	5.5 Acres	Yes	----	----	----

Acreage is approximate
* Includes 5.5 acres of Privately owned land used for administration area only.
** No DOD Action Indicated (NDAI) may be more appropriate.

c. **Ordnance and Explosive Waste Actions**

(1) Engineering Evaluation / Cost Analysis (EE/CA)

EE/CAs are recommended for Area B, as it is an area of confirmed ordnance presence. This and additional issues and concerns for the EE/CA are in Table 3-2.

TABLE 3-2
EE/CA ISSUES AND CONCERNS

AREA	SIZE ACRES	EE/CA ITEM	ISSUES AND CONCERNS
B	2.0	Policy Consideration	No energetic OE was discovered by SI team. The area also had several dirt mounds that was uncharacteristic to the relatively level area. These mounds could possibly be a potential OE burial location which was an authorized procedure during that time or a Native American burial ground
		Field Investigation	Brona Simon of the Massachusetts Historical Commission reported that there are archeologically sensitive areas on former Nantucket Municipal Airport lands. **Any** actions taken within subject area may require oversight by the Massachusetts Historical Commission. This office should be contacted prior to the conduct of any remediation.

(2) No DOD Action Indicated (NDAI)

NDAI is recommended for Area A, C, and D on account of there is no historical or present day evidence to suggest that OE exists in this area.

d. **Other Environmental Remediation Actions**

No other environmental remediation actions are recommended at this time.

ORDNANCE AND EXPLOSIVES
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ATTACHMENT A

RISK ASSESSMENT AREAS A

MAGAZINE AREA

18 June 1999

RISK ASSESSMENT PROCEDURES FOR
ORDNANCE AND EXPLOSIVES (OE) SITES

Site Name	Naval Auxiliary Air Facility	Rater's Name	Jon P Jones
Site Location	Nantucket Municipal Airport	Phone Number	309-782-1493
DERP Project #	D01MA049901	Organization	CEMVR-ED-DO
Date Completed	15 January 2000	Score	5

OE RISK ASSESSMENT: AREA A – MAGAZINE AREA

This risk assessment procedure was developed in accordance with MIL-STD 882C and AR 385-10. The Risk Assessment Code (RAC) score will be used by the U.S. Army Engineering and Support Center, Huntsville (USAESCH), Ordnance and Explosives Team (USAESCH-OE) to prioritize the remedial action(s) at Formerly Used Defense Sites (FUDS). The risk assessment should be based on the best available information resulting from records searches, reports of Explosive Ordnance Disposal (EOD) Detachments actions, field observations, interviews, and measurements. This information is used to assess the risk involved based on the potential OE hazards identified at the site. The risk assessment is composed of two factors, hazard severity, and hazard probability. Personnel involved in visits to potential OE sites should view the USAESCH-OE videotape entitled "A Life Threatening Encounter: OEW".

Part 1. Hazard Severity: Hazard severity categories are defined to provide a qualitative measure of the worst credible event resulting from personnel exposure to various types and quantities of unexploded ordnance.

TYPE OF ORDNANCE: (Circle all that apply)	VALUE
A. Conventional ordnance and ammunition:	
Medium/large caliber (20mm and larger)	10
Bombs, explosive	10
Grenades, hand or rifle, explosive	10
Landmine, explosive	10
Rockets, guided missile, explosive	10
Detonators, blasting caps, fuzes, boosters, bursters	6
Bombs, practice (w/spotting charges)	6
Grenades, practice (w/spotting charges)	4
Landmine, practice (w/spotting charges)	4
Small arms, complete round (.22 cal - .50 cal)	1
Small arms, expended	(0)
Practice ordnance (wo/spotting charges)	0
Conventional ordnance and ammunition (largest single value)	0

What evidence do you have regarding conventional unexploded ordnance?

There is no evidence of ordnance in Area A.

B. Pyrotechnics (for munitions not described above):	VALUE
Munition (containers) containing White Phosphorus (WP) or other pyrophoric material (i.e., spontaneously flammable):	10
Munition containing a flame or incendiary material (i.e., Napalm, Triethylaluminum metal incendiaries):	6
Flares, signals, simulators, screening smokes (other than WP):	4
Pyrotechnics (select the single largest value)	0

What evidence do you have regarding pyrotechnics?
There is no evidence of pyrotechnics in Areas A.

C. Bulk High Explosives (HE) (not an integral part of conventional ordnance; uncontainerized):	VALUE
Primary or initiating explosives (Lead Styphnate, Lead Azide, Nitroglycerin, Mercury Azide, Mercury Fulminate, Tetracene, etc.)	10
Demolition charges	10
Secondary explosives (PETN, Compositions A, B, C, Tetryl, TNT, RDX, HMX, HBX, Black Powder, etc.)	8
Military dynamite	6
Less sensitive explosives (Ammonium Nitrate, Explosive D, etc.)	3
High explosives (select the largest single value)	0

What evidence do you have regarding bulk explosives?
There is no evidence of bulk explosives in Areas A.

D. Bulk propellants (not an integral part of rockets, guided missiles, or other conventional ordnance; uncontainerized.	VALUE
Solid or liquid propellants	6
Propellants	0

What evidence do you have regarding bulk propellants?
There is no evidence of propellants in Areas A.

E. Chemical Warfare Materiel (CWM) and Radiological Weapons:	VALUE
Toxic chemical agents (choking, nerve, blood, blister)	25
War Gas Identification Sets	20
Radiological	15
Riot Control Agents (vomiting, tear)	5
Chemical and Radiological (select the largest single value)	0

What evidence do you have regarding chemical or radiological?
There is no evidence of chemical or radiological in Areas A.

TOTAL HAZARD SEVERITY VALUE (Sum of values A through E (maximum of 61)	0

Apply this value to Table 1 to determine Hazard Severity Category

TABLE 1

HAZARD SEVERITY*

DESCRIPTION	CATEGORY	HAZARD SEVERITY VALUE
CATASTROPHIC	I	21 and/or greater
CRITICAL	II	10 to 20
MARGINAL	III	5 to 9
NEGLIGIBLE	IV	1 to 4
**NONE	(V)	0

*Apply Hazard Severity Category to Table 3

**If hazard severity value is 0, you do not need to complete Part II of this form. Proceed to Part III and use a RAC score of 5 to determine your appropriate action.

PART II. Hazard Probability. The probability that a hazard has been, or will be, created due to the presence and other rated factors of unexploded ordnance or explosive materials on a formerly used Department of Defense (DoD) site.

TOTAL HAZARD PROBABILITY VALUE	0

Apply this value to Hazard Probability Table 2 to determine the Hazard Probability Level.

TABLE 2

HAZARD PROBABILITY

DESCRIPTION	LEVEL	HAZARD PROBABILITY VALUE
FREQUENT	A	27 or greater
PROBABLE	B	21 to 26
OCCASIONAL	C	15 to 20
REMOTE	D	8 to 14
IMPROBABLE	(E)	less than 8

*Apply Hazard Probability Level to Table 3.

Part III. Risk Assessment. The risk assessment value for this site is determined using the following Table. Enter the results of the Hazard Probability and Hazard Severity values.

TABLE 3

PROBABILITY LEVEL	FREQUENT A	PROBABLE B	OCCASIONAL C	REMOTE D	IMPROBABLE E
SEVERITY CATEGORY:					
CATASTROPHIC I	1	1	2	3	4
CRITICAL II	1	2	3	4	5
MARGINAL II	2	3	4	4	5
NEGLIGIBLE IV	3	4	4	5	(5)

RISK ASSESSMENT CODE (RAC)

RAC 1 Expedite INPR, recommending further action by USAESCH - Immediately call USAESCH-OE-S (comm 205-895-1582/1598).

RAC 2 High priority on completion on INPR - Recommend further action by USAESCH.

RAC 3 Complete INPR - Recommend further action by USAESCH.

RAC 4 Complete INPR - Recommend further action by USAESCH.

(RAC 5) Usually indicates that No DoD Action Indicated (NDAI). Submit NDAI and RAC to USAESCH.

PART IV. Narrative. Summarize the documented evidence that supports this risk assessment. If no documented evidence was available, explain all the assumptions that you made.

This area consists of approximately 11.5 acres of sparsely vegetated land located on the current airport property. The area was used to store ammunition and ammunition components. The former Naval storage magazines are currently utilized by Nantucket Municipal Airport and private businesses as storage areas.

An inspection of this area by the site inspection (SI) team found no OE or evidence of OE in this area. Airport personnel have not found OE in this area only spent small arms cartridges.

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ATTACHMENT B

RISK ASSESSMENT AREAS B

WOODED DUMP AREA

18 June 1999

RISK ASSESSMENT PROCEDURES FOR
ORDNANCE AND EXPLOSIVES (OE) SITES

Site Name	Naval Auxiliary Air Facility	Rater's Name	Jon P Jones
Site Location	Nantucket Municipal Airport	Phone Number	309-782-1493
DERP Project #	D01MA049901	Organization	CEMVR-ED-DO
Date Completed	15 January 2000	Score	3

OE RISK ASSESSMENT: AREA B - WOODED DUMP

This risk assessment procedure was developed in accordance with MIL-STD 882C and AR 385-10. The Risk Assessment Code (RAC) score will be used by the U.S. Army Engineering and Support Center, Huntsville (USAESCH), Ordnance and Explosives Team (USAESCH-OE) to prioritize the remedial action(s) at Formerly Used Defense Sites (FUDS). The risk assessment should be based on the best available information resulting from records searches, reports of Explosive Ordnance Disposal (EOD) Detachments actions, field observations, interviews, and measurements. This information is used to assess the risk involved based on the potential OE hazards identified at the site. The risk assessment is composed of two factors, hazard severity, and hazard probability. Personnel involved in visits to potential OE sites should view the USAESCH-OE videotape entitled "A Life Threatening Encounter: OEW".

Part 1. Hazard Severity: Hazard severity categories are defined to provide a qualitative measure of the worst credible event resulting from personnel exposure to various types and quantities of unexploded ordnance.

TYPE OF ORDNANCE: (Circle all that apply)	VALUE
A. Conventional ordnance and ammunition:	
Medium/large caliber (20mm and larger)	10
Bombs, explosive	10
Grenades, hand or rifle, explosive	10
Landmine, explosive	10
Rockets, guided missile, explosive	10
Detonators, blasting caps, fuzes, boosters, bursters	6
Bombs, practice (w/spotting charges)	(6)
Grenades, practice (w/spotting charges)	4
Landmine, practice (w/spotting charges)	4
Small arms, complete round (.22 cal - .50 cal)	1
Small arms, expended	0
Practice ordnance (wo/spotting charges)	0
Conventional ordnance and ammunition (largest single value)	6

What evidence do you have regarding conventional unexploded ordnance?

Expended 3.5 inch Rkt Mtrs, 100lb Practice bombs, found on site.

B. Pyrotechnics (for munitions not described above):	VALUE
Munition (containers) containing White Phosphorus (WP) or other pyrophoric material (i.e., spontaneously flammable):	10
Munition containing a flame or incendiary material (i.e., Napalm, Triethylaluminum metal incendiaries):	6
Flares, signals, simulators, screening smokes (other than WP):	4
Pyrotechnics (select the single largest value)	0

What evidence do you have regarding pyrotechnics?
There is no evidence of pyrotechnics in Areas B.

C. Bulk High Explosives (HE) (not an integral part of conventional ordnance; uncontainerized):	VALUE
Primary or initiating explosives (Lead Styphnate, Lead Azide, Nitroglycerin, Mercury Azide, Mercury Fulminate, Tetracene, etc.)	10
Demolition charges	10
Secondary explosives (PETN, Compositions A, B, C, Tetryl, TNT, RDX, HMX, HBX, Black Powder, etc.)	8
Military dynamite	6
Less sensitive explosives (Ammonium Nitrate, Explosive D, etc.)	3
High explosives (select the largest single value)	0

What evidence do you have regarding bulk explosives?
There is no evidence of bulk explosives in Areas B.

D. Bulk propellants (not an integral part of rockets, guided missiles, or other conventional ordnance; uncontainerized.	VALUE
Solid or liquid propellants	6
Propellants	0

What evidence do you have regarding bulk propellants?
There is no evidence of propellants in Areas B.

E. Chemical Warfare Materiel (CWM) and Radiological Weapons:	VALUE
Toxic chemical agents (choking, nerve, blood, blister)	25
War Gas Identification Sets	20
Radiological	15
Riot Control Agents (vomiting, tear)	5
Chemical and Radiological (select the largest single value)	0

What evidence do you have regarding chemical or radiological?
There is no evidence of chemical or radiological in Areas B.

TOTAL HAZARD SEVERITY VALUE (Sum of values A through E (maximum of 61)	6

Apply this value to Table 1 to determine Hazard Severity Category

TABLE 1
HAZARD SEVERITY*

DESCRIPTION	CATEGORY	HAZARD SEVERITY VALUE
CATASTROPHIC	I	21 and/or greater
CRITICAL	II	10 to 20
MARGINAL	(III)	5 to 9
NEGLIGIBLE	IV	1 to 4
**NONE	V	0

*Apply Hazard Severity Category to Table 3

**If hazard severity value is 0, you do not need to complete Part II of this form. Proceed to Part III and use a RAC score of 5 to determine your appropriate action.

PART II. Hazard Probability. The probability that a hazard has been, or will be, created due to the presence and other rated factors of unexploded ordnance or explosive materials on a formerly used Department of Defense (DoD) site.

AREA, EXTENT, ACCESSIBILITY OF OE HAZARD
(Circle all that apply)

A. Locations of OE hazards:	VALUE
On the surface	(5)
Within tanks, pipes, vessels, or other confined areas	4
Inside walls, ceilings, or other building/structure	3
Subsurface	(2)
Location (select the single largest value)	5

What evidence do you have regarding location of OE?
Potential for buried OE items on site. (earth mounds on site that could be buried OE or Native American burial site)

B. Distance to nearest inhabited location/structure likely to be at risk from OE hazard (road, park, playground, building, etc.)	VALUE
Less than 1,250 feet	(5)
1,250 feet to 0.5 mile	4
0.5 mile to 1.0 mile	3
1.0 mile to 2.0 miles	2
Over 2 miles	1
Distance (select the single largest value)	5

What are the nearest inhabited structures/buildings?
There is propane storage / offices for the island gas company. Cement company structures.

C. Number(s) of building(s) within a 2-mile radius measured from the OE hazard area, not the installation boundary. VALUE

26 and over	5
16 to 25	4
11 to 15	(3)
6 to 10	2
1 to 5	1
0	0
Number of buildings (select the single largest value)	3

Narrative: **Storage buildings, Office building (manufacture).**

D. Types of Buildings (within a 2 mile radius) VALUE

Educational, child care, residential, hospitals hotels, commercial, shopping centers	(5)
Industrial, warehouse, etc.	(4)
Agricultural, forestry, etc.	3
Detention, correctional	2
No buildings	0
Types of buildings (select the single largest value)	5

Describe the types of buildings:
Industrial type offices, **equipment/storage buildings**, hotels, residential areas.

E. Accessibility to site refers to access by humans to ordnance and explosives. Use the following guidance: VALUE

No barrier nor security system	5
Barrier is incomplete (e.g., in disrepair or does completely surround the site). Barrier is intended to deny egress from the site, as for a barbed wire fence for grazing.	4
A barrier (any kind of fence **in good repair) but no** means to control entry. Barrier is intended to deny access to the site.	(3)
Security Guard, but no barrier	2
Isolated site	1
A 24-hour surveillance system (e.g., television monitoring or surveillance by guards or facility personnel continuously monitors and controls entry; or, an artificial or natural barrier (e.g., fence combined with a cliff) which completely surrounds the area; and, a means to control entry at all times through the gates or other entrances (e.g., an attendant, television monitors, locked entrances, or controlled roadway access to the area).	0
Accessibility (select the single largest value)	3

Describe the site accessibility:
The airport is fenced per FAA Regulations.

F. Site Dynamics. This deals with site conditions are subject to change in the future, but may be stable at the present. Examples would be excessive soil erosion on beaches or streams, increasing land development that could reduce distances from the site to inhabited areas or otherwise increase accessibility. VALUE

Expected---------- (5)
None anticipated---------- 0

Site dynamics (select value) 5
Describe the site dynamics:
The airport is currently in the planning phase of extending their runways. The concrete company currently is building within close proximity of the site.

TOTAL HAZARD PROBABILITY VALUE (sum of largest values for A through F (maximum of 30)	26

Apply this value to Hazard Probability Table 2 to determine the Hazard Probability Level.

TABLE 2
HAZARD PROBABILITY

DESCRIPTION	LEVEL	HAZARD PROBABILITY VALUE
FREQUENT	A	27 or greater
PROBABLE	(B)	21 to 26
OCCASIONAL	C	15 to 20
REMOTE	D	8 to 14
IMPROBABLE	E	less than 8

*Apply Hazard Probability Level to Table 3.

Part III. Risk Assessment. The risk assessment value for this site is determined using the following Table. Enter the results of the Hazard Probability and Hazard Severity values.

TABLE 3

PROBABILITY LEVEL	FREQUENT A	PROBABLE B	OCCASIONAL C	REMOTE D	IMPROBABLE E
SEVERITY CATEGORY:					
CATASTROPHIC I	1	1	2	3	4
CRITICAL II	1	2	3	4	5
MARGINAL II	2	(3)	4	4	5
NEGLIGIBLE IV	3	4	4	5	5

RISK ASSESSMENT CODE (RAC)

RAC 1: Expedite INPR, recommending further action by USAESCH - Immediately call USAESCH-OE-S (comm 205-895-1582/1598).

RAC 2: High priority on completion on INPR - Recommend further action by USAESCH.

(RAC 3) Complete INPR - Recommend further action by USAESCH.

RAC 4: Complete INPR - Recommend further action by USAESCH.

RAC 5: Usually indicates that No DoD Action Indicated (NDAI). Submit NDAI and RAC to USAESCH.

PART IV. Narrative. Summarize the documented evidence that supports this risk assessment. If no documented evidence was available, explain all the assumptions that you made.

This area consists of approximately 2.0 acres of fully vegetated land. This area appears to be the dumpsite the Navy used during the clean up prior to returning the airport back to the town. The area also had several dirt mounds that was uncharacteristic to the relatively level area. These mounds could possibly be a potential OE burial location which was an authorized procedure during that time or a Native American burial ground

In spite of the fact that the Navy performed a decontamination operation at this facility at the time the apparent procedure was to accumulate all the OE debris and place it in one location and in some cases [illegible] covered with dirt (dirt mound), or place it in a hole and cover it. This may have happened at this locat[illegible] which would explain the earth mounds around this area. Digging a hole would not have been possible since the water table is so high on Nantucket Island.

The site inspection team discovered OE debris associated with spent. 100lb practice bombs, 3.5 inch rocket motors, 20MM small arms ammunition containers, and OE scrap metal.

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ARCHIVES SEARCH REPORT
FOR
NANTUCKET MUNICIPAL AIRPORT
FORMER NAVAL AUXILIARY AIR FACILITY
NANTUCKET ISLAND, MASSACHUSETTS
PROJECT NUMBER D01MA049901

ATTACHMENT C

RISK ASSESSMENT AREAS C

OPEN STORAGE / DUMP SITE AREA

18 June 1999

RISK ASSESSMENT PROCEDURES FOR
ORDNANCE AND EXPLOSIVES (OE) SITES

Site Name	Naval Auxiliary Air Facility	Rater's Name	Jon P Jones
Site Location	Nantucket Municipal Airport	Phone Number	309-782-1493
DERP Project #	D01MA049901	Organization	CEMVR-ED-DO
Date Completed	15 January 2000	Score	5

OE RISK ASSESSMENT: AREA C - OPEN STORAGE / DUMP SITE

This risk assessment procedure was developed in accordance with MIL-STD 882C and AR 385-10. The Risk Assessment Code (RAC) score will be used by the U.S. Army Engineering and Support Center, Huntsville (USAESCH), Ordnance and Explosives Team (USAESCH-OE) to prioritize the remedial action(s) at Formerly Used Defense Sites (FUDS). The risk assessment should be based on the best available information resulting from records searches, reports of Explosive Ordnance Disposal (EOD) Detachments actions, field observations, interviews, and measurements. This information is used to assess the risk involved based on the potential OE hazards identified at the site. The risk assessment is composed of two factors, hazard severity, and hazard probability. Personnel involved in visits to potential OE sites should view the USAESCH-OE videotape entitled "A Life Threatening Encounter: OEW".

Part 1. Hazard Severity: Hazard severity categories are defined to provide a qualitative measure of the worst credible event resulting from personnel exposure to various types and quantities of unexploded ordnance.

TYPE OF ORDNANCE: (Circle all that apply)	**VALUE**
A. Conventional ordnance and ammunition:	
Medium/large caliber (20mm and larger)	10
Bombs, explosive	10
Grenades, hand or rifle, explosive	10
Landmine, explosive	10
Rockets, guided missile, explosive	10
Detonators, blasting caps, fuzes, boosters, bursters	6
Bombs, practice (w/spotting charges)	6
Grenades, practice (w/spotting charges)	4
Landmine, practice (w/spotting charges)	4
Small arms, complete round (.22 cal - .50 cal)	1
Small arms, expended	0
Practice ordnance (wo/spotting charges)	0
Conventional ordnance and ammunition (largest single value)	0

What evidence do you have regarding conventional unexploded ordnance?

There is no evidence of ordnance in Area C.

B. Pyrotechnics (for munitions not described above):	VALUE
Munition (containers) containing White Phosphorus (WP) or other pyrophoric material (i.e., spontaneously flammable):	10
Munition containing a flame or incendiary material (i.e., Napalm, Triethylaluminum metal incendiaries):	6
Flares, signals, simulators, screening smokes (other than WP):	4
Pyrotechnics (select the single largest value)	0

What evidence do you have regarding pyrotechnics?
There is no evidence of pyrotechnics in Areas C.

C. Bulk High Explosives (HE) (not an integral part of conventional ordnance; uncontainerized):	VALUE
Primary or initiating explosives (Lead Styphnate, Lead Azide, Nitroglycerin, Mercury Azide, Mercury Fulminate, Tetracene, etc.)	10
Demolition charges	10
Secondary explosives (PETN, Compositions A, B, C, Tetryl, TNT, RDX, HMX, HBX, Black Powder, etc.)	8
Military dynamite	6
Less sensitive explosives (Ammonium Nitrate, Explosive D, etc.)	3
High explosives (select the largest single value)	0

What evidence do you have regarding bulk explosives?
There is no evidence of bulk explosives in Areas C.

D. Bulk propellants (not an integral part of rockets, guided missiles, or other conventional ordnance; uncontainerized.	VALUE
Solid or liquid propellants	6
Propellants	0

What evidence do you have regarding bulk propellants?
There is no evidence of propellants in Areas C.

E. Chemical Warfare Materiel (CWM) and Radiological Weapons:	VALUE
Toxic chemical agents (choking, nerve, blood, blister)	25
War Gas Identification Sets	20
Radiological	15
Riot Control Agents (vomiting, tear)	5
Chemical and Radiological (select the largest single value)	0

What evidence do you have regarding chemical or radiological?
There is no evidence of chemical or radiological in Areas C.

TOTAL HAZARD SEVERITY VALUE (Sum of values A through E (maximum of 61)	0

Apply this value to Table 1 to determine Hazard Severity Category

TABLE 1
HAZARD SEVERITY*

DESCRIPTION	CATEGORY	HAZARD SEVERITY VALUE
CATASTROPHIC	I	21 and/or greater
CRITICAL	II	10 to 20
MARGINAL	III	5 to 9
NEGLIGIBLE	IV	1 to 4
**NONE	(V)	0

*Apply Hazard Severity Category to Table 3

**If hazard severity value is 0, you do not need to complete Part II of this form. Proceed to Part III and use a RAC score of 5 to determine your appropriate action.

PART II. Hazard Probability. The probability that a hazard has been, or will be, created due to the presence and other rated factors of unexploded ordnance or explosive materials on a formerly used Department of Defense (DoD) site.

TOTAL HAZARD PROBABILITY VALUE	0

Apply this value to Hazard Probability Table 2 to determine the Hazard Probability Level.

TABLE 2
HAZARD PROBABILITY

DESCRIPTION	LEVEL	HAZARD PROBABILITY VALUE
FREQUENT	A	27 or greater
PROBABLE	B	21 to 26
OCCASIONAL	C	15 to 20
REMOTE	D	8 to 14
IMPROBABLE	(E)	less than 8

*Apply Hazard Probability Level to Table 3.

Part III. Risk Assessment. The risk assessment value for this site is determined using the following Table. Enter the results of the Hazard Probability and Hazard Severity values.

TABLE 3

PROBABILITY LEVEL	FREQUENT A	PROBABLE B	OCCASIONAL C	REMOTE D	IMPROBABLE E
SEVERITY CATEGORY:					
CATASTROPHIC I	1	1	2	3	4
CRITICAL II	1	2	3	4	5
MARGINAL II	2	3	4	4	5
NEGLIGIBLE IV	3	4	4	5	(5)

RISK ASSESSMENT CODE (RAC)

RAC 1: Expedite INPR, recommending further action by USAESCH - Immediately call USAESCH-OE-S (comm 205-895-1582/1598).

RAC 2: High priority on completion on INPR - Recommend further action by USAESCH.

RAC 3: Complete INPR - Recommend further action by USAESCH.

RAC 4: Complete INPR - Recommend further action by USAESCH.

(RAC 5): Usually indicates that No DoD Action Indicated (NDAI). Submit NDAI and RAC to USAESCH.

PART IV. Narrative. Summarize the documented evidence that supports this risk assessment. If no documented evidence was available, explain all the assumptions that you made.

This area consists of approximately 48.0 acres of sparsely vegetated land located on the current airport property. The area was used as an outside storage area and dump area for equipment during the time frame when it was under the control of the Navy. Nantucket Municipal Airport has utilized this same area over the years and today only use a small portion of the same area for outside storage.

This area is considered an area of **no ordnance presence.** There is no reported OE occurrence found, no historical, interview, or physical evidence of an OE presence within this area.

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ATTACHMENT D

RISK ASSESSMENT AREAS D

OTHER LANDS

18 June 1999

RISK ASSESSMENT PROCEDURES FOR
ORDNANCE AND EXPLOSIVES (OE) SITES

Site Name	Naval Auxiliary Air Facility	Rater's Name	Jon P Jones
Site Location	Nantucket Municipal Airport	Phone Number	309-782-1493
DERP Project #	D01MA049901	Organization	CEMVR-ED-DO
Date Completed	15 January 2000	Score	5

OE RISK ASSESSMENT: AREA D - OTHER LANDS

This risk assessment procedure was developed in accordance with MIL-STD 882C and AR 385-10. The Risk Assessment Code (RAC) score will be used by the U.S. Army Engineering and Support Center, Huntsville (USAESCH), Ordnance and Explosives Team (USAESCH-OE) to prioritize the remedial action(s) at Formerly Used Defense Sites (FUDS). The risk assessment should be based on the best available information resulting from records searches, reports of Explosive Ordnance Disposal (EOD) Detachments actions, field observations, interviews, and measurements. This information is used to assess the risk involved based on the potential OE hazards identified at the site. The risk assessment is composed of two factors, hazard severity, and hazard probability. Personnel involved in visits to potential OE sites should view the USAESCH-OE videotape entitled "A Life Threatening Encounter: OEW".

Part 1. Hazard Severity: Hazard severity categories are defined to provide a qualitative measure of the worst credible event resulting from personnel exposure to various types and quantities of unexploded ordnance.

TYPE OF ORDNANCE: (Circle all that apply)	**VALUE**
A. **Conventional ordnance and ammunition:**	
Medium/large caliber (20mm and larger)	10
Bombs, explosive	10
Grenades, hand or rifle, explosive	10
Landmine, explosive	10
Rockets, guided missile, explosive	10
Detonators, blasting caps, fuzes, boosters, bursters	6
Bombs, practice (w/spotting charges)	6
Grenades, practice (w/spotting charges)	4
Landmine, practice (w/spotting charges)	4
Small arms, complete round (.22 cal - .50 cal)	1
Small arms, expended	0
Practice ordnance (wo/spotting charges)	0
Conventional ordnance and ammunition (largest single value)	0

What evidence do you have regarding conventional unexploded ordnance?

There is no evidence of ordnance in Area D.

B. Pyrotechnics (for munitions not described above):	VALUE
Munition (containers) containing White Phosphorus (WP) or other pyrophoric material (i.e., spontaneously flammable):	10
Munition containing a flame or incendiary material (i.e., Napalm, Triethylaluminum metal incendiaries):	6
Flares, signals, simulators, screening smokes (other than WP):	4
Pyrotechnics (select the single largest value)	0

What evidence do you have regarding pyrotechnics?
There is no evidence of pyrotechnics in Areas D.

C. Bulk High Explosives (HE) (not an integral part of conventional ordnance; uncontainerized):	VALUE
Primary or initiating explosives (Lead Styphnate, Lead Azide, Nitroglycerin, Mercury Azide, Mercury Fulminate, Tetracene, etc.)	10
Demolition charges	10
Secondary explosives (PETN, Compositions A, B, C, Tetryl, TNT, RDX, HMX, HBX, Black Powder, etc.)	8
Military dynamite	6
Less sensitive explosives (Ammonium Nitrate, Explosive D, etc.)	3
High explosives (select the largest single value)	0

What evidence do you have regarding bulk explosives?
There is no evidence of bulk explosives in Areas D.

D. Bulk propellants (not an integral part of rockets, guided missiles, or other conventional ordnance; uncontainerized.	VALUE
Solid or liquid propellants	6
Propellants	0

What evidence do you have regarding bulk propellants?
There is no evidence of propellants in Areas D.

E. Chemical Warfare Materiel (CWM) and Radiological Weapons:	VALUE
Toxic chemical agents (choking, nerve, blood, blister)	25
War Gas Identification Sets	20
Radiological	15
Riot Control Agents (vomiting, tear)	5
Chemical and Radiological (select the largest single value)	0

What evidence do you have regarding chemical or radiological?
There is no evidence of chemical or radiological in Areas D.

TOTAL HAZARD SEVERITY VALUE (Sum of values A through E (maximum of 61)	0

Apply this value to Table 1 to determine Hazard Severity Category

TABLE 1
HAZARD SEVERITY*

DESCRIPTION	CATEGORY	HAZARD SEVERITY VALUE
CATASTROPHIC	I	21 and/or greater
CRITICAL	II	10 to 20
MARGINAL	III	5 to 9
NEGLIGIBLE	IV	1 to 4
**NONE	(V)	0

*Apply Hazard Severity Category to Table 3

**If hazard severity value is 0, you do not need to complete Part II of this form. Proceed to Part III and use a RAC score of 5 to determine your appropriate action.

PART II. Hazard Probability. The probability that a hazard has been, or will be, created due to the presence and other rated factors of unexploded ordnance or explosive materials on a formerly used Department of Defense (DoD) site.

TOTAL HAZARD PROBABILITY VALUE	0

Apply this value to Hazard Probability Table 2 to determine the Hazard Probability Level.

TABLE 2
HAZARD PROBABILITY

DESCRIPTION	LEVEL	HAZARD PROBABILITY VALUE
FREQUENT	A	27 or greater
PROBABLE	B	21 to 26
OCCASIONAL	C	15 to 20
REMOTE	D	8 to 14
IMPROBABLE	(E)	less than 8

*Apply Hazard Probability Level to Table 3.

Part III. Risk Assessment. The risk assessment value for this site is determined using the following Table. Enter the results of the Hazard Probability and Hazard Severity values.

TABLE 3

PROBABILITY LEVEL	FREQUENT A	PROBABLE B	OCCASIONAL C	REMOTE D	IMPROBABLE E
SEVERITY CATEGORY:					
CATASTROPHIC I	1	1	2	3	4
CRITICAL II	1	2	3	4	5
MARGINAL II	2	3	4	4	5
NEGLIGIBLE IV	3	4	4	5	(5)

RISK ASSESSMENT CODE (RAC)

RAC 1: Expedite INPR, recommending further action by USAESCH - Immediately call USAESCH-OE-S (comm 205-895-1582/1598).

RAC 2: High priority on completion on INPR - Recommend further action by USAESCH.

RAC 3: Complete INPR - Recommend further action by USAESCH.

RAC 4: Complete INPR - Recommend further action by USAESCH.

(RAC 5): Usually indicates that No DoD Action Indicated (NDAI). Submit NDAI and RAC to USAESCH.

PART IV. Narrative. Summarize the documented evidence that supports this risk assessment. If no documented evidence was available, explain all the assumptions that you made.

This area consists of all property identified as part of the former Naval Auxiliary Air Facility, other than that contained within Areas A through C (approximately 516 acres). The SI team found no historical, interview, or physical evidence of an OE presence within this area.

This area is considered an area of **no ordnance presence**. This area served as the billeting, recreation, subsidence, and support area for the personnel. This area consists of all property and structures identified as part of the former Naval Auxiliary Air Facility, other than that contained within Areas A through C (approximately 516 acres). The assessment team found no historical, interview, or physical evidence of OE found, burial, or a remaining presence within this area.

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PROJECT NUMBER D01MA049901

ATTACHMENT E

RISK ASSESSMENT AREAS E

AREAS A - D

18 June 1999

RISK ASSESSMENT PROCEDURES FOR
ORDNANCE AND EXPLOSIVES (OE) SITES

Site Name	Naval Auxiliary Air Facility	Rater's Name	Jon P Jones
Site Location	Nantucket Municipal Airport	Phone Number	309-782-1493
DERP Project #	D01MA049901	Organization	CEMVR-ED-DO
Date Completed	15 January 2000	Score	3

OE RISK ASSESSMENT: ENTIRE SITE - Areas A - D

This risk assessment procedure was developed in accordance with MIL-STD 882C and AR 385-10. The Risk Assessment Code (RAC) score will be used by the U.S. Army Engineering and Support Center, Huntsville (USAESCH), Ordnance and Explosives Team (USAESCH-OE) to prioritize the remedial action(s) at Formerly Used Defense Sites (FUDS). The risk assessment should be based on the best available information resulting from records searches, reports of Explosive Ordnance Disposal (EOD) Detachments actions, field observations, interviews, and measurements. This information is used to assess the risk involved based on the potential OE hazards identified at the site. The risk assessment is composed of two factors, hazard severity, and hazard probability. Personnel involved in visits to potential OE sites should view the USAESCH-OE videotape entitled "A Life Threatening Encounter: OEW".

Part 1. Hazard Severity: Hazard severity categories are defined to provide a qualitative measure of the worst credible event resulting from personnel exposure to various types and quantities of unexploded ordnance.

TYPE OF ORDNANCE: (Circle all that apply)	VALUE
A. Conventional ordnance and ammunition:	
Medium/large caliber (20mm and larger)	10
Bombs, explosive	10
Grenades, hand or rifle, explosive	10
Landmine, explosive	10
Rockets, guided missile, explosive	10
Detonators, blasting caps, fuzes, boosters, bursters	6
Bombs, practice (w/spotting charges)	(6)
Grenades, practice (w/spotting charges)	4
Landmine, practice (w/spotting charges)	4
Small arms, complete round (.22 cal - .50 cal)	1
Small arms, expended	0
Practice ordnance (wo/spotting charges)	0
Conventional ordnance and ammunition (largest single value)	6

What evidence do you have regarding conventional unexploded ordnance?

Expended 3.5 inch Rkt Mtrs, 100lb Practice bombs, found in Area B.

B. Pyrotechnics (for munitions not described above):	VALUE
Munition (containers) containing White Phosphorus (WP) or other pyrophoric material (i.e., spontaneously flammable):	10
Munition containing a flame or incendiary material (i.e., Napalm, Triethylaluminum metal incendiaries):	6
Flares, signals, simulators, screening smokes (other than WP):	4
Pyrotechnics (select the single largest value)	0

What evidence do you have regarding pyrotechnics?
There is no evidence of pyrotechnics in Areas A - D.

C. Bulk High Explosives (HE) (not an integral part of conventional ordnance; uncontainerized):	VALUE
Primary or initiating explosives (Lead Styphnate, Lead Azide, Nitroglycerin, Mercury Azide, Mercury Fulminate, Tetracene, etc.)	10
Demolition charges	10
Secondary explosives (PETN, Compositions A, B, C, Tetryl, TNT, RDX, HMX, HBX, Black Powder, etc.)	8
Military dynamite	6
Less sensitive explosives (Ammonium Nitrate, Explosive D, etc.)	3
High explosives (select the largest single value)	0

What evidence do you have regarding bulk explosives?
There is no evidence of bulk explosives in Areas A - D.

D. Bulk propellants (not an integral part of rockets, guided missiles, or other conventional ordnance; uncontainerized.	VALUE
Solid or liquid propellants	6
Propellants	0

What evidence do you have regarding bulk propellants?
There is no evidence of propellants in Areas A - D.

E. Chemical Warfare Materiel (CWM) and Radiological Weapons:	VALUE
Toxic chemical agents (choking, nerve, blood, blister)	25
War Gas Identification Sets	20
Radiological	15
Riot Control Agents (vomiting, tear)	5
Chemical and Radiological (select the largest single value)	0

What evidence do you have regarding chemical or radiological?
There is no evidence of chemical or radiological in Areas A - D.

TOTAL HAZARD SEVERITY VALUE (Sum of values A through E (maximum of 61)	6

Apply this value to Table 1 to determine Hazard Severity Category

TABLE 1
HAZARD SEVERITY*

DESCRIPTION	CATEGORY	HAZARD SEVERITY VALUE
CATASTROPHIC	I	21 and/or greater
CRITICAL	II	10 to 20
MARGINAL	(III)	5 to 9
NEGLIGIBLE	IV	1 to 4
**NONE	V	0

*Apply Hazard Severity Category to Table 3

**If hazard severity value is 0, you do not need to complete Part II of this form. Proceed to Part III and use a RAC score of 5 to determine your appropriate action.

PART II. Hazard Probability. The probability that a hazard has been, or will be, created due to the presence and other rated factors of unexploded ordnance or explosive materials on a formerly used Department of Defense (DoD) site.

AREA, EXTENT, ACCESSIBILITY OF OE HAZARD
(Circle all that apply)

A. Locations of OE hazards:	VALUE
On the surface	(5)
Within tanks, pipes, vessels, or other confined areas	4
Inside walls, ceilings, or other building/structure	3
Subsurface	(2)
Location (select the single largest value)	5

What evidence do you have regarding location of OE?
Potential for buried OE items on site. (earth mounds on site that could be buried OE or Native American burial site)

B. Distance to nearest inhabited location/structure likely to be at risk from OE hazard (road, park, playground, building, etc.)	VALUE
Less than 1,250 feet	(5)
1,250 feet to 0.5 mile	4
0.5 mile to 1.0 mile	3
1.0 mile to 2.0 miles	2
Over 2 miles	1
Distance (select the single largest value)	5

What are the nearest inhabited structures/buildings?
There is propane storage / offices for the island gas company. Cement company structures.

C. Number(s) of building(s) within a 2-mile radius measured from the OE hazard area, not the installation boundary. VALUE

26 and over	5
16 to 25	4
11 to 15	(3)
6 to 10	2
1 to 5	1
0	0
Number of buildings (select the single largest value)	3

Narrative: **Storage buildings, Office building (manufacture).**

D. Types of Buildings (within a 2 mile radius) VALUE

Educational, child care, residential, hospitals hotels, commercial, shopping centers	(5)
Industrial, warehouse, etc.	(4)
Agricultural, forestry, etc.	3
Detention, correctional	2
No buildings	0
Types of buildings (select the single largest value)	5

Describe the types of buildings:
Industrial type offices, equipment/storage buildings, hotels, residential areas.

E. Accessibility to site refers to access by humans to ordnance and explosives. Use the following guidance: VALUE

No barrier nor security system	5
Barrier is incomplete (e.g., in disrepair or does completely surround the site). Barrier is intended to deny egress from the site, as for a barbed wire fence for grazing.	4
A barrier (any kind of fence in good repair) but no means to control entry. Barrier is intended to deny access to the site.	(3)
Security Guard, but no barrier	2
Isolated site	1
A 24-hour surveillance system (e.g., television monitoring or surveillance by guards or facility personnel continuously monitors and controls entry; or, an artificial or natural barrier (e.g., fence combined with a cliff) which completely surrounds the area; and, a means to control entry at all times through the gates or other entrances (e.g., an attendant, television monitors, locked entrances, or controlled roadway access to the area).	0
Accessibility (select the single largest value)	3

Describe the site accessibility:
The airport is fenced per FAA Regulations.

F. Site Dynamics. This deals with site conditions are subject to change in the future, but may be stable at the present. Examples would be excessive soil erosion on beaches or streams, increasing land development that could reduce distances from the site to inhabited areas or otherwise increase accessibility.

VALUE

Expected---------- (5)
None anticipated---------- 0

Site dynamics (select value) 5

Describe the site dynamics:

The airport is currently in the planning phase of extending their runways. The concrete company currently is building within close proximity of the site.

TOTAL HAZARD PROBABILITY VALUE (sum of largest values for A through F (maximum of 30)	26

Apply this value to Hazard Probability Table 2 to determine the Hazard Probability Level.

TABLE 2
HAZARD PROBABILITY

DESCRIPTION	LEVEL	HAZARD PROBABILITY VALUE
FREQUENT	A	27 or greater
PROBABLE	(B)	21 to 26
OCCASIONAL	C	15 to 20
REMOTE	D	8 to 14
IMPROBABLE	E	less than 8

*Apply Hazard Probability Level to Table 3.

Part III. Risk Assessment. The risk assessment value for this site is determined using the following Table. Enter the results of the Hazard Probability and Hazard Severity values.

TABLE 3

PROBABILITY LEVEL	FREQUENT A	PROBABLE B	OCCASIONAL C	REMOTE D	IMPROBABLE E
SEVERITY CATEGORY:					
CATASTROPHIC I	1	1	2	3	4
CRITICAL II	1	2	3	4	5
MARGINAL II	2	(3)	4	4	5
NEGLIGIBLE IV	3	4	4	5	5

RISK ASSESSMENT CODE (RAC)

RAC 1: Expedite INPR, recommending further action by USAESCH - Immediately call USAESCH-OE-S (comm 205-895-1582/1598).

RAC 2: High priority on completion on INPR - Recommend further action by USAESCH.

(RAC 3) Complete INPR - Recommend further action by USAESCH.

RAC 4: Complete INPR - Recommend further action by USAESCH.

RAC 5: Usually indicates that No DoD Action Indicated (NDAI). Submit NDAI and RAC to USAESCH.

PART IV. Narrative. Summarize the documented evidence that supports this risk assessment. If no documented evidence was available, explain all the assumptions that you made.

The Areas A-D consists of approximately 577.5 acres.

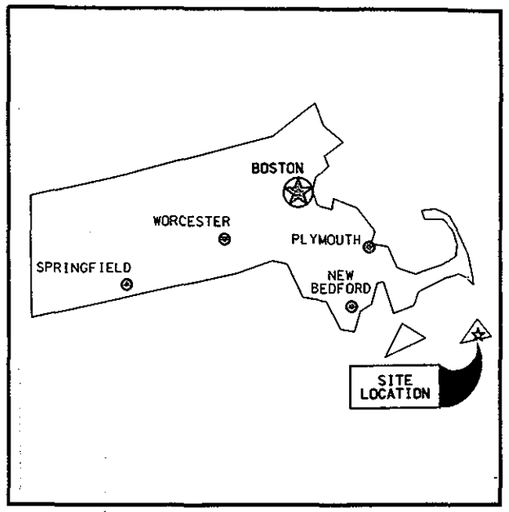
Area B consists of approximately 2.0 acres of fully vegetated land. This area appears to be the dumpsite the Navy used during the clean up prior to returning the airport back to the town. The area also had several dirt mounds that were uncharacteristic to the relatively level area. These mounds could possibly be a potential OE burial location that was an authorized procedure during that time or it could be a Native American burial ground.
Digging a hole would not have been possible since the water table is so high on Nantucket Island.

The site inspection team discovered OE debris associated with spent, 100lb practice bombs, 3.5 inch rocket motors, 20MM small arms ammunition containers and OE scrap metal.

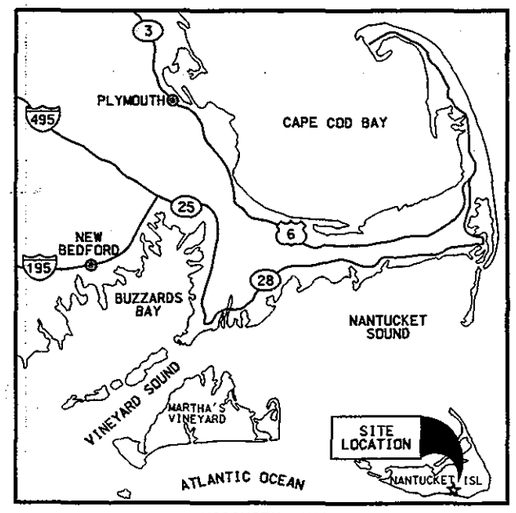
ORDNANCE AND EXPLOSIVES
ARCHIVES SEARCH REPORT
FOR
NANTUCKET MUNICIPAL AIRPORT
FORMER NAVAL AUXILIARY AIR FACILITY
NANTUCKET ISLAND, MASSACHUSETTS
PROJECT NUMBER D01MA049901

REPORT PLATES

Naval Auxiliary Air Facility



STATE MAP OF MASSACHUSETTS



VICINITY MAP

2000 0 2000 4000 Feet

LEGEND

- HARD ROAD
- PROJECT BOUNDARY
- STATE PLANE COORDINATES
- UNIMPROVED ROAD (SAND)

Revisions			
Symbol	Description	Date	Approved

U.S. ARMY ENGINEER DISTRICT
CORPS OF ENGINEERS
ROCK ISLAND, ILLINOIS

Designed by: J.P.JONES	NANTUCKET NAAF NANTUCKET, MA.
Drawn by: J.P.JONES	SITE MAP
Checked by: C. CHURNEY	
Reviewed by: R.E.HOFFMAN	Scales:
Approved by: WILLIAM J. BAYLES COLONEL, EN COMMANDING	Dates:
	Drawing Codes:
	Sheet reference number:
	Project Number: D01MA049901
	PLATE 1

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Gravel Pit

OLD SOUTH ROAD

OLD

Radio Towers

FARM BUILDINGS

NOBADEER

LANE

MACY'S

SOUTH

ROAD

OLD SOUTH ROAD

FUSING HUT

FIRE HOUSE

CANTONMENT AREA

LEACHING BED

OPERATIONS TOWER

MAG 1

MAG 4

MAG 8

MAG 2 & 3

MAGAZINE AREA

MAG 5 & 6

MAG 7

OPEN STORAGE / DUMP SITE

MACY'S LANE

Nobadeer Valley

NEW SOUTH ROAD

JEEP TR

Maquechan

ATLANTIC OCEAN

N

400 0 400 800 Feet

LEGEND

HARD ROAD

UNIMPROVED ROAD

PROJECT BOUNDARY

Revisions			
Symbol	Description	Date	Approved

U.S. ARMY ENGINEER DISTRICT
CORPS OF ENGINEERS
ROCK ISLAND, ILLINOIS

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Drawn by: J.P.JONES
Checked by: C. CHURNEY
Reviewed by: R.E.HOFFMAN
Approved by: WILLIAM J. BAYLES COLONEL, EN COMMANDING

US Army Corps of Engineers Rock Island District

NANTUCKET NAAF
NANTUCKET, MA.

FACILITY LAYOUT
1945

Scales:
Dates:
Drawing Codes:
Sheet reference numbers:

Project Numbers: D01MA049901

PLATE 2

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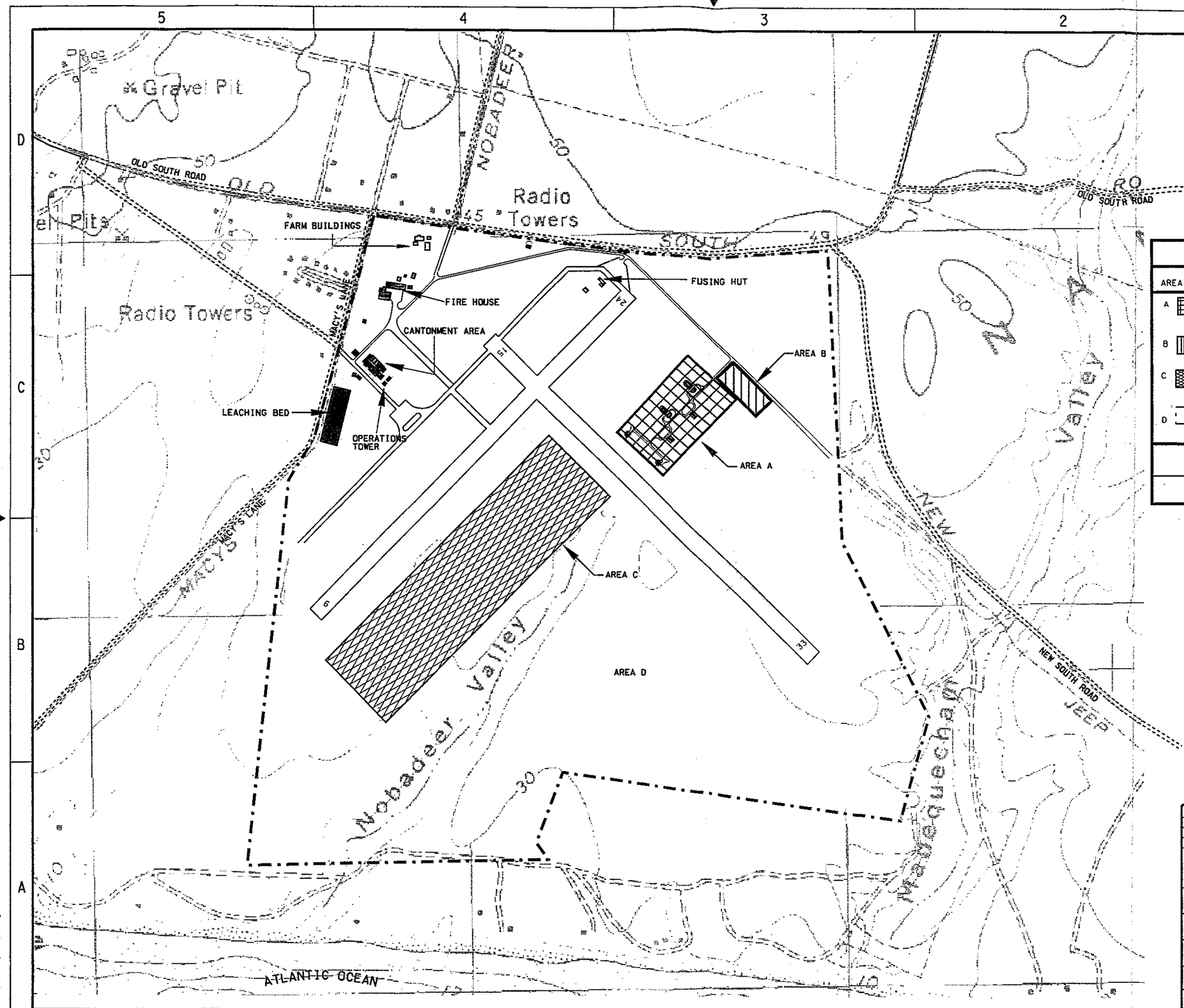

OE PROJECT AREA			
AREA	DESCRIPTION	OE PRESENCE	ACREAGE
A	MAGAZINE AREA	NO ORDNANCE PRESENCE	11.50
B	WOODED DUMP SITE	CONFIRMED	2.00
C	RUNWAY OPEN STORAGE/DUMP SITE	NO ORDNANCE PRESENCE	48.00
D	OTHER LANDS	NO ORDNANCE PRESENCE	516.00
		TOTAL FDE ACRES:	572.00
		TOTAL ADDITIONAL ACRES:	5.50
		TOTAL ACRES (A.B.C & D) :	577.50

NOTE: MAGAZINE 8 IS THE ONLY MAGAZINE THAT IS NO LONGER STANDING ON SITE.

400 0 400 800 Feet

LEGEND

- HARD ROAD
- UNIMPROVED ROAD
- PROJECT BOUNDARY

Revisions			
Symbol	Description	Date	Approved

U.S. ARMY ENGINEER DISTRICT
CORPS OF ENGINEERS
ROCK ISLAND, ILLINOIS

Designed by: J.P.JONES
Drawn by: J.P.JONES
Checked by: C. CHURNEY
Reviewed by: R.E.HOFFMAN
Approved by: WILLIAM J. BAYLES, COLONEL, EN COMMANDING

US Army Corps of Engineers

NANTUCKET NAAF
NANTUCKET, MA.

OE PROJECT AREAS

Scales:
Dates:
Drawing Codes:
Sheet reference numbers:

Project Number: D01MA049901

PLATE 3

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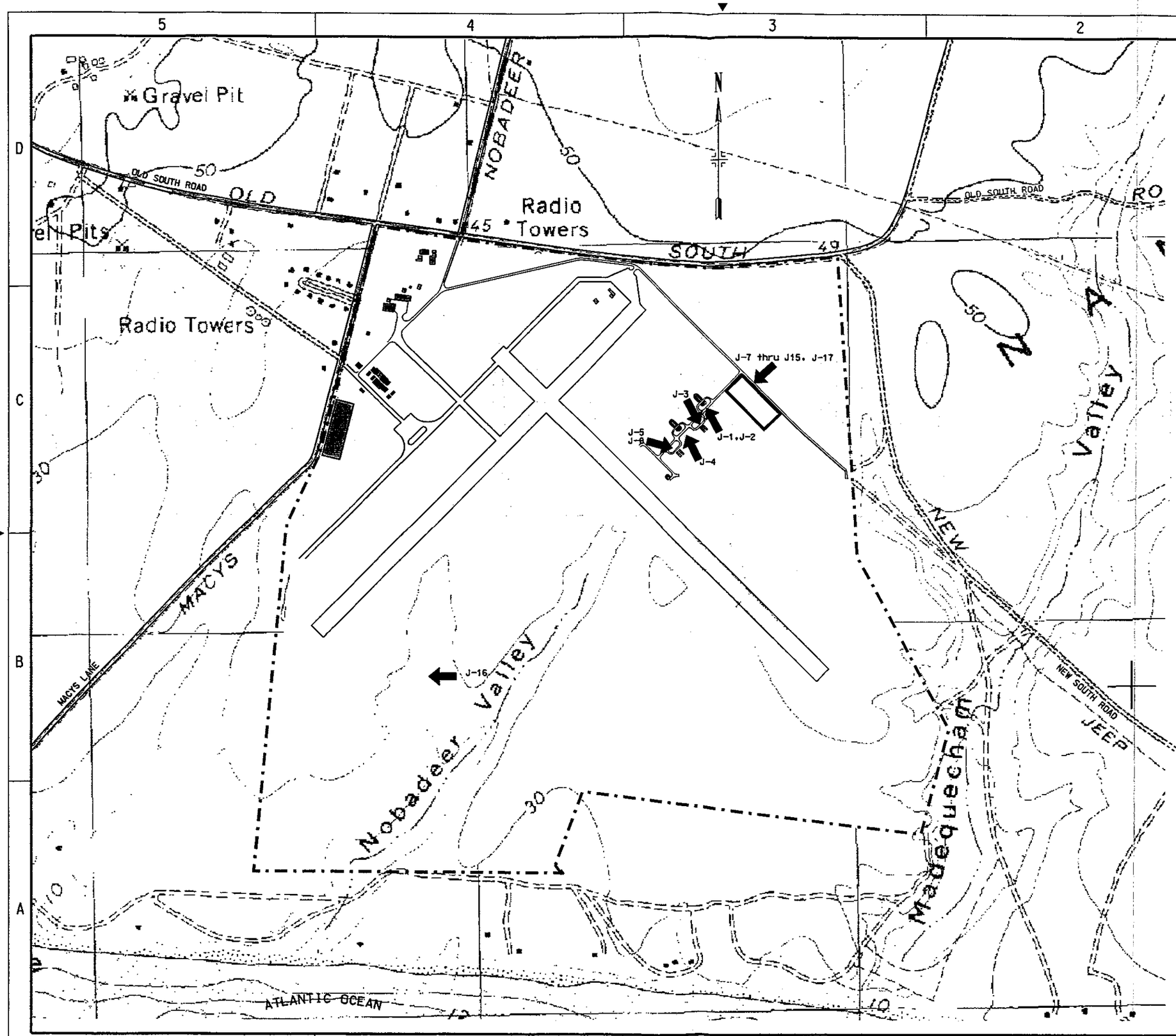

PHOTO LOCATIONS

J-1. AREA A: STORAGE MAGAZINE 1 USED BY AIRPORT AS STORAGE

J-2. AREA A: INSIDE STORAGE MAGAZINE 1

J-3. AREA A: STORAGE MAGAZINE 2 & 3 LEASED TO THE LOCAL GAS COMPANY

J-4. AREA A: STORAGE MAGAZINE 4 USED BY THE AIRPORT FOR STORAGE

J-5. AREA A: STORAGE MAGAZINE 5 USED BY THE AIRPORT FOR STORAGE

J-6. AREA A: STORAGE MAGAZINE 6 USED BY THE AIRPORT FOR STORAGE

J-7. AREA B: WOODED DUMP AREA. SCRAP FROM 100 LB PRACTICE BOMB

J-8. AREA B: WOODED DUMP AREA. SCRAP FROM 100 LB SAND FILLED PRACTICE BOMB

J-9. AREA B: WOODED DUMP AREA. 55 GALLON DRUMS

J-10. AREAB: WOODED DUMP AREA. 55 GALLON DRUM

J-11. AREA B: WOODED DUMP AREA. SCRAP FROM 100 LB SAND FILLED PRACTICE BOMB

J-12. AREA B: WOODED DUMP AREA. SCRAP FROM 100 LB SAND FILLED PRACTICE BOMB

J-13. AREA B: WOODED AREA DUMP. METAL SCRAP

J-14. AREA B: WOODED AREA DUMP. AMMUNITION CANS 20MM

J-15. AREA B: WOODED AREA DUMP. ONE OF SEVERAL POTENTIAL BURIAL MOUNDS OF OE OR NATIVE AMERICAN BURIAL SITE
NOTE: PORTIONS OF NANTUCKET MUNICIPAL AIRPORT PROPERTY ARE ARCHAEOLOGICALL SENSITIVE (SEE DOCUMENT F-14)

J-16. AREA B: WOOD DUMP AREA 3.5 INCH ROCKET MOTOR

J-17. AREA C: RUNWAY DUMP AREA. CURRENT DAY DUMP SITE AREA.

Revisions			
Symbol	Description	Date	Approved

U.S. ARMY ENGINEER DISTRICT
CORPS OF ENGINEERS
ROCK ISLAND, ILLINOIS

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Drawn by: J.P.JONES	
Checked by: C. CHURNEY	PHOTOGRAPH LOCATIONS
Reviewed by: R.E.HOFFMAN	Scale:
Approved by: WILLIAM J. BAYLES COLONEL, EN COMMANDING	Date:
	Drawing Code:
	Sheet reference number:
	Project Number: D01MA049901
	PLATE 4

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